

CLASSIFICATION:

**UNCLASSIFIED**

EXHIBIT R-2, RDT&E Budget Item Justification								DATE: <b>JUNE 2001</b>		
APPROPRIATION/BUDGET ACTIVITY <b>RESEARCH DEVELOPMENT TEST &amp; EVALUATION, NAVY/BA-5</b>					R-1 ITEM NOMENCLATURE <b>NTDS Improv./ Common C&amp;D / 0604518N</b>					
COST (\$ in Millions)	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	Cost to Complete	Total Cost
Total PE Cost	<b>7.715</b>	<b>3.686</b>	<b>5.392</b>						<b>CONT</b>	<b>CONT</b>
NTDS Software Improvement/Common C&D/K1604	<b>7.715</b>	<b>3.686</b>	<b>5.392</b>						<b>CONT</b>	<b>CONT</b>
Quantity of RDT&E Articles										
<p>* CC&amp;D program was funded in FY00/01 under the PE: 0603582N, Combat Systems Integration (CSI), Project Unit: S0164</p> <p>A. Mission Description and Budget Item Justification</p> <p>FY00-FY01 The ACDS Block 1 program replaces the vintage Naval Tactical Data System (NTDS) operating systems and applications algorithms and implements advanced concepts for Tactical Data Systems upgrades for surface combatants in response to future threats, operational deficiencies and new and existing operational requirements. The increased emphasis on joint operations and littoral warfare has improved the importance of ACDS Block 1's joint operability and improved littoral warfare capabilities. The program's objective is to develop integrated real time command and control systems that will increase ship's operational capabilities; promo standardization and introduce new shipboard tactical displays and support equipment; and provide integration between sensor/weapons system which are organic to and outside the battle force. This program provides for significant Combat Direction System (CDS) improvements including implementation of the Joint Tactical Information Data System (JTIDS/Tactical Data Information Link Joint (TADILJ) (LINK 16) message standard to support interoperability/joint operations with U.S. Navy/Air Force/Marine and NATO forces; implementation of the Aegis Tactical Executive System (ATES); and integration and interface with the Command and Control Processor (C2P), the Cooperative Engagement Capability (CEC), and Ship's Self Defense System (SSDS).</p> <p>FY02-07 Common Command and Decision (CC&amp;D) capability is a pre-planned product improvement (P3-I) to the Aegis Weapon System and the Ship Self-Defense System (SSDS) Mk 2 that replaces the command and decision capability presently in these systems with a common computer program. This effort will avoid future life-cycle costs by reducing the number of computer programs that must be maintained, enable the navy to field new or modified warfighting capability by eliminating the redundant, conflicting processing present in existing systems. CC&amp;D is a critical step toward developing systems that will resolve long-term interoperability problems and achieve improvements in the air picture.</p>										

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EXHIBIT R-2, RDT&E Budget Item Justification		DATE: <b>JUNE 2001</b>
APPROPRIATION/BUDGET ACTIVITY <b>RDT&amp;E, N/ BA 5</b>	PROGRAM ELEMENT NAME AND NUMBER <b>CIC Conversion/ 0604518N</b>	PROJECT NAME AND NUMBER: <b>NTDS Improv./ Common C&amp;D / 0604518N Project K1604</b>

(U) PROGRAM ACCOMPLISHMENTS AND PLANS:

1. (U) FY 2000 Accomplishments:
  - (U) (\$3.343) Participated in CEC Baseline 3 DT/OT events in support of CEC's TECHEVAL and OPEVAL.
  - (U) (\$1.551) Corrected software and hardware trouble reports associated with shipboard deliveries of ACDS Block 1 Level 2.1.x onboard CVN 68 and LHD 7, and upgraded CVN 67, CVN 69 and LHD 1 with 2.1.x software build.
  - (U) (\$2.821) Completed interoperability corrections & conducted Navy and Joint Link Certification, followed by a Battle Group Testing of ACDS Block 1 and CEC Baseline 2.
2. (U) FY 2001 Plan:
  - (U) (\$3.606) Support TECHEVAL and OPEVAL with CEC and correct any deficiencies.
  - (U) (\$0.080) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.
3. (U) FY 2002 Plan:
  - (U) (\$3.450) Continue Design Engineering.
  - (U) (\$0.650) Continue Acquisition Management Support.
  - (U) (\$1.292) Continue Technical Management Support.

	FY 2000	FY 2001	FY 2002
FY 2001 President's Budget Submit:	8.082	3.720	0.000
Appropriated Value:	8.126	3.720	
Adjustments to FY2000/2001 Appropriated Value/ FY2001 President's Budget:	-0.411	-0.034	5.392
FY 2002 PRES Budget Submit:	7.715	3.686	5.392

Funding:

FY 2000: Funding decrease due to Small Business Innovation Research adjustment (\$-0.157) and minor pricing adjustments (-\$0.254).

FY2001: Funding decrease due to Proportionate Rescission (-\$0.034).

FY2002: Funding increase due to transfer of Common C&D from PE0603582N/S0164 (+\$13.700) and minor pricing adjustments (+0.016), reductions to off-set Navy Priorities (-\$8.300) and reduction for NWCF rates (-\$0.024).

Schedule: N/A

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EXHIBIT R-2, RDT&E Budget Item Justification							DATE: <b>JUNE 2001</b>																								
APPROPRIATION/BUDGET ACTIVITY <b>RDTE&amp;E, N/ BA 5</b>		PROGRAM ELEMENT NAME AND NUMBER <b>CIC Conversion/ 0604518N</b>			PROJECT NAME AND NUMBER: <b>NTDS Improv./ Common C&amp;D / 0604518N Project K1604</b>																										
<p>C. Other Program Funding Summary</p> <p>O&amp;M,N 0708017N/46N80 Ship System Tactical</p> <table> <thead> <tr> <th></th> <th><u>FY 2000</u></th> <th><u>FY 2001</u></th> <th><u>FY 2002</u></th> <th><u>FY 2003</u></th> <th><u>FY 2004</u></th> <th><u>FY 2005</u></th> <th><u>FY 2006</u></th> <th><u>FY 2007</u></th> <th>To <u>Complete</u></th> <th><u>Total Cost</u></th> </tr> </thead> <tbody> <tr> <td>NTDS</td> <td>13.909</td> <td>13.922</td> <td>14.137</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>CONT.</td> <td>CONT.</td> </tr> </tbody> </table> <p>D. Acquisition Strategy:</p> <p>NTDS: ACDS Block 1 program will be completed in FY 2001 upon the completion of CEC Baseline 2 TECHEVAL and OPEVALs. Until then the hardware and software corrections will be made by Raytheon Systems Company via a sole source contract, N00024-97-C-5466. The life cycle maintenance and software support agent for ACDS Block 1 is NAVSEA Damneck.</p> <p>Common C&amp;D: Three Technical Instructions were awarded to Lockheed Martin Government Electronic Systems (Moorestown, NJ), Raytheon Naval and Maritime Systems (San Diego, CA), and Digital Systems Resource (Fairfax, VA) to conduct Design Engineering to define the CC&amp;D program in support of Milestone I/II Decision in FY 2005. This will provide CC&amp;D capability to Aegis and Ship Self Defense System (SSDS) Surface Ships in FY 2010.</p>											<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	To <u>Complete</u>	<u>Total Cost</u>	NTDS	13.909	13.922	14.137						CONT.	CONT.
	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	To <u>Complete</u>	<u>Total Cost</u>																					
NTDS	13.909	13.922	14.137						CONT.	CONT.																					

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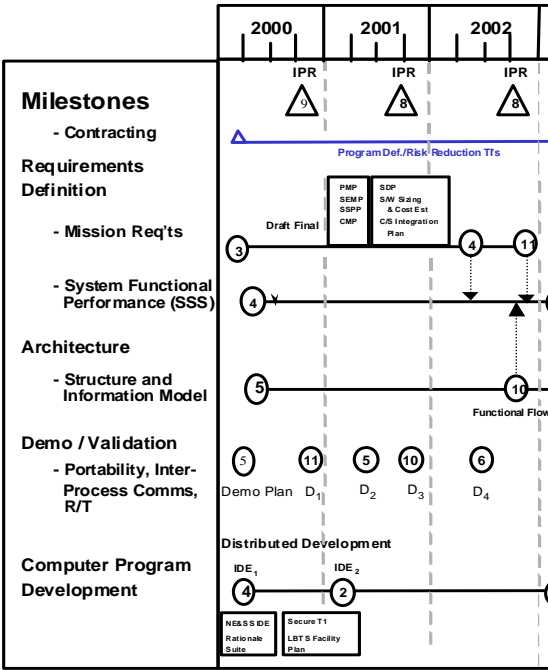
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EXHIBIT R-2, RDT&E Budget Item Justification		DATE: JUNE 2001
APPROPRIATION/BUDGET ACTIVITY RDT&E, N/ BA 5	PROGRAM ELEMENT NAME AND NUMBER CIC Conversion/ 0604518N	PROJECT NAME AND NUMBER: NTDS Improv./ Common C&D / 0604518N Project K1604

E. Schedule Profile:

Common C&D Program Schedule



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Exhibit R-3 Cost Analysis (page 1)								DATE: <b>JUNE 2001</b>				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
<b>RDT&amp;E,N/BA 5</b>			<b>CIC Conversion/0604518N</b>			<b>NTDS Improv./ Common C&amp;D / 0604518N Project K1604</b>						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
Primary Product Development	C/CPAF	Hughes Aircraft Co.	106.521	0.000	N/A	0.000	N/A	0.000	N/A	0.000	106.521	106.521
Primary Product Development	SS/CPFF	Hughes Aircraft Co.	17.806	0.000	N/A	0.000	N/A	0.000	N/A	0.000	17.806	48.418
Primary Product Development	SS/CPFF	Raytheon Systems Co.	5.897	5.422	10/99	2.551	10/00	0.000	N/A	0.000	13.870	25.945
Govt. Engineering & Formal Test	WR	SSC-SD	43.326	0.000	N/A	0.000	N/A	0.000	N/A	0.000	43.326	N/A
Govt. System Eng./ILS/Training/Test	WR	NSWC/PHD	2.139	0.194	10/99	0.000	10/00	0.000	N/A	0.000	2.333	N/A
Miscellaneous/Government	VAR	Various	0.677	0.249	10/99	0.511	10/00	0.000	N/A	0.000	1.437	N/A
Miscellaneous/Contractors	VAR	Various	10.345	0.300	10/99	0.000	10/00	0.000	N/A	0.000	10.645	N/A
Software Development	C/CPFF	Raytheon Systems	0.000	0.000	N/A	0.000	N/A	1.150	10/01	CONT.	CONT.	
Software Development	C/CPFF	Lockheed Martin	0.000	0.000	N/A	0.000	N/A	1.150	10/01	CONT.	CONT.	
Software Development	C/CPFF	DSR	0.000	0.000	N/A	0.000	N/A	1.150	10/01	CONT.	CONT.	
System Engineering	WR/RC	NSWC, DD	0.000	0.000	N/A	0.000	N/A	0.816	10/01	CONT.	CONT.	
Subtotal Product Development			186.711	6.165		3.062		4.266		CONT.	CONT.	
Remarks: N00024-97-C-5466 was awarded as a CPAF/CPFF contract, with CLIN 0007 for ACDS Block 1 program specific efforts was a CPFF/LOE CLIN.												
Test Facility/Simulation Upgrd./Lic	VAR	Various	13.134	0.906	N/A	0.149	N/A	0.000	N/A	0.000	14.189	N/A
Training Development											0.000	
Integrated Logistics Support											0.000	
Configuration Management											0.000	
Technical Data											0.000	
GFE											0.000	
Subtotal Support			13.134	0.906		0.149		0.000		0.000	14.189	
Remarks:												

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**Exhibit R-3, Project Cost Analysis**  
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Exhibit R-3 Cost Analysis (page 2)								DATE: <b>JUNE 2001</b>				
APPROPRIATION/BUDGET ACTIVITY			PROGRAM ELEMENT			PROJECT NAME AND NUMBER						
<b>RDT&amp;E, N</b>			<b>CIC Conversion/ 0604518N</b>			<b>NTDS Improv./ Common C&amp;D / 0604518N Project K1604</b>						
Cost Categories (Tailor to WBS, or System/Item Requirements)	Contract Method & Type	Performing Activity & Location	Total PY s Cost	FY 00 Cost	FY 00 Award Date	FY 01 Cost	FY 01 Award Date	FY 02 Cost	FY 02 Award Date	Cost to Complete	Total Cost	Target Value of Contract
DT/OT Test, Test Spt., IV&V Efforts	VAR	Various	21.137	0.439	10/99		10/00	0.000	N/A	0.000	21.576	N/A
Operational Test & Evaluation											0.000	
Tooling											0.000	
GFE											0.000	
Subtotal T&E			21.137	0.439		0.000		0.000		0.000	21.576	
Remarks:												
Resource Management Support	VAR	Various	0.688	0.000	10/99	0.000	10/00	0.000	N/A	0.000	0.688	3.944
Government Engineering Support	VARIOUS	VARIOUS	0.000	0.130	N/A	0.400	N/A					
Contractor Engineering Support	VARIOUS	VARIOUS	0.000	0.000	N/A	0.000	N/A	0.400	10/01	CONT.	CONT.	
Program Management Support	VARIOUS	VARIOUS	0.000	0.000	N/A	0.000	N/A	0.696	10/01	CONT.	CONT.	
Travel	PD	NAVSEA	0.000	0.000	N/A	0.000	N/A	0.030	10/01	CONT.	CONT.	
Travel	VAR	Various	0.000	0.075	10/99	0.075	10/00	0.000	N/A	0.000	0.150	3.944
Subtotal Management			0.688	0.205		0.475		1.126		CONT.	CONT.	
Remarks: N00024-95-C-5433 was not awarded specifically for ACDS Block 1, support also includes SSDS MK 1 support efforts.												
Total Cost			221.670	7.715		3.686		5.392		CONT.	CONT.	
Remarks:												

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**Exhibit R-3, Project Cost Analysis**  
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